et No.: ACY33,377

Patent

DT03 Rec'd PCT/PT0

23 AUG 2002

NITED STATES PATENT AND TRADEMARK OFFICE

In re of Application of:

Metcalf, Thomas N. III et al.

Serial No.:

09/674,368

Group Art No.:

TBD

Filed:

April 29, 1999

Examiner:

Christopher Low

For:

VACCINES CONTAINING RECOMBINANT PILIN AGAINST

NEISSERIA GONORRHOEAE OR NEISSERIA MENINGITIDIS

Confirmation No.:

Customer Number:

25291

August 23, 2002

TRANSMITTAL LETTER

Examiner Christopher Low U.S. Patent and Trademark Office Box Sequence, P.O. Box 2327 Arlington, VA 22202

Dear Examiner Low:

As per the suggestion you made during our telephone conversation, attached herewith is a computer-readable copy and a paper copy of the sequence listing in the above-identified application together with a statement under 37 C.F.R.§§1.821-1.825 that the computer-readable version and the paper copy are the same. I have also attached herewith a copy of "Notification of Defective Response", and a copy of the letter that was sent to Mr. Robert Sparr, together with supporting documents indicating that the defective sequence listing resulted from the incompatibility of PatentIn, Version 2.0 with PatentIn, Version 3.0.

CERTIFICATE OF MAILING 37 CFR §1.10

I hereby certify that this paper and the documents referred to as enclosed therein are being deposited with the United States Postal Service on the date written below in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number ET937376770US addressed to the Commissioner for Patents, Washington, DC 20231.

08/23/02

Date

Andy P. Iyer, Ph.D.

BEST AVAILABLE COPY

Should you need to get in touch with me or should you need any additional information, please do not hesitate to contact me at (845)-602-2189. Thank you for your consideration and help.

Respectfully submitted,

Anand (Andy) P. Iyer, Ph.D.

Carol E. Rozek

Attorney for Applicants

Reg. No. 36,993

SEND ALL CORRESPONDENCE: TO:

Wyeth Patent Law Department Five Giralda Farms Madison, NJ 07940 Tel. No. (845) 602-2189



Z3Z91



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Metcalf, Thomas N. III et al.)
)
Serial No.: 09/674368)
)
Filed: April 29, 1999)
)
For: VACCINES CONTAINING RECOMBINANT)
PILIN AGAINST NEISSERIA GONORRHOEAE)
OR NEISSERIA MENINGITIDIS)
)
Customer No.: 25291)
)
Art Unit: TBD)
)
Examiner: Low, Christopher)

RESPONSE TO NOTICE TO COMPLY AND STATEMENT UNDER 37 C.F.R. .§§1.821-1.825

August 22, 2002

Hon. Commissioner for Patents U.S. Patent and Trademark Office Box Sequence, P.O. Box 2327 Arlington, VA 22202

Dear Sir:

In a "Notification of Defective Response" dated March 18, 2002, the Patent Office rejected the computer-readable form and paper copy of the sequence listing for failing to adhere to the requirements of the sequence rules. The applicants have submitted herewith in response to the notification a substitute computer-readable form of the sequence together with the substitute paper copy in compliance with the requirements of 37 C.F.R.§§1.821-1.825. The applicants further state that the content of the paper and computer-readable

CERTIFICATE OF MAILING 37 CFR §1.10 the documents referred to as enclosed therein are being denosited with the l

I hereby certify that this paper and the documents referred to as enclosed therein are being deposited with the United States Postal Service on the date written below in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number & 7376770 addressed to the Commissioner for Patents, Washington, DC 20231.

08/25/02

Date

Anand P. Iyer, Ph.D.

copies of the sequence listing submitted herewith are the same and include no new matter. Also attached herewith is a copy of the "Notification of Defective Response". The Applicants respectfully request reconsideration and entry of the substitute sequence listing, or in the event any fees are required for the entry of this paper and the sequence listing, the Patent Office is hereby authorized to charge Deposit Account No. 01-1425.

Respectfully submitted,

Caul & Rock

Carol E. Rozek

Attorney for Applicant

Reg. No. 36,993

Wyeth Patent Law Department Five Giralda Farms Madison, NJ 07940 Tel. No. (845) 602-2189



Alan M Gordon

One Campus Drive

Parsippany, NJ 07054

UNITED STATES PATENT AND TRADEMARK OFFICE

Corresissioner for Pateras, Box PC United States Patent and Trademark Office Washington, P.C. 2021 www.uppb.den

U.S. APPLICATION NUMBER NO.

FIRST NAMED APPLICANT

ATTY. DOCKET NO.

09/674,368

American Home Products Corporation

Thomas N III Metcalf

33377-00

INTERNATIONAL APPLICATION NO.

PCT/US99/09486

I.A. FILING DATE

PRIORITY DATE

04/29/1999

CONFIRMATION NO. 6981 371 FORMALITIES LETTER

OC00000007646414

Date Mailed: 03/18/2002

Patent Law Department 2B

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- · U.S. Basic National Fee
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Oath or Declaration

RECEIVED

APR - 2 2002

Anand P. Iyer Patent Law Department Pearl River, NY

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
 - APPLICANT-MUST-PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."

DECEIVED NAR 2 8 7002



UNITED STATES PATENT AND TRADEMARK OFFICE



U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO.

09/674,368 Thomas N III Metcalf 33377-00

INTERNATIONAL APPLICATION NO.

PCT/US99/09486

LA. FILING DATE PRIORITY DATE

04/29/1999

Alan M Gordon
Patent Law Department 2B
American Home Products Corporation
One Campus Drive
Parsippany, NJ 07054

CONFIRMATION NO. 6981
371 FORMALITIES LETTER
COC000000007646414*

Date Mailed: 03/18/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Oath or Declaration

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
 - -APPLICANT-MUST-PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."



- For Rules Interpretation, call (703) 308-4216
- To Purchase Patentin Software, call (703) 306-2600
- For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov
- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

DEBORAH D WILLIAMS

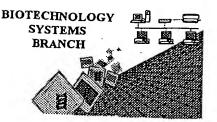
Telephone: (703) 305-3744

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/674,368	PCT/US99/09486	33377-00

FORM PCT/DO/EO/916 (371 Formalities Notice)

DU



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09

Source:

Date Processed by STIC:

09/674,368 A

2/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
 Hand Carry directly to:
- U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room-1B03, Crystal-Plaza Two,

 Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

50ED 1031-2001 Muil

Raw Sequence Listing Error Summary

OR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/674,368A	-
n: new rules case	S: Please disregard english "Alpha" headers, which were inserted by pto s	OFTWARE
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	-
Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
Patentin 2.0 "bug"	A "bug" in Patentin version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) 2,4	· · · · · · · · · · · · · · · · · · ·
Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	·
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to Include the skipped sequences.	
Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
_Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.	
Invalid <213> Response	Per 1.823 of Sequence Roles, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
Mbase of a	n ear only be used to represent a single nucleouse in a nucleic sets sequence. It is not used to represent any value not specifically a nucleotide.	
	AMC/MH - Biotechnology Systems Branch - 08/21/2001	•

AMC/MH - Biotechnology Systems Branch - 08/21/200



PCT09

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/674,368A

67 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly

DATE: 02/06/2002 TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

Does Not Comply
Corrected Diskette Needed

```
5 <110> APPLICANT: American Cyanamid Company
7 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria
        Gonorrhoeae or Neisseria Meningitidis
11 <130> FILE REFERENCE: 33377-00/PCT
13 <140> CURRENT APPLICATION NUMBER: US/09/674,368A
14 <141> CURRENT FILING DATE: 2001-12-11
16 <160> NUMBER OF SEQ ID NOS: 24
18 <170> SOFTWARE: PatentIn Ver. 2.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 504
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: Chimeric of
         Neisseria Meningitidis Class I and Neisseria
         Gonorrhoeae
30 <220> FEATURE:
31 <221> NAME/KEY: CDS
32 <222> LOCATION: (1)..(501)
34 <400> SEQUENCE: 1
36 atg gat acc ctt caa aaa ggc ttt acc ctt atc gag ctg atg att gtg 48
37 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
                     5
                                        10
40 atc gcc atc gtc ggc att ttg gcg gca gtc gcc ctt ccc gcc tac caa 96
41 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
                                    25
44 gac tac acc gcc cgc gcg caa gtt tcc gaa gcc atc ctt ttg gcc gaa 144
45 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
48 ggt caa aaa tca gcc gtt acc gag tat tac ctg aat cac ggc gaa tgg 192
49 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
        50 .
                            55
52 ccc ggc aac aac act tct gcc ggc gtg gca tct tct tca aca atc aaa 240
53 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Thr Ile Lys
                        70
                                            75
58 ggc aaa tat gtt aag gaa gtt aca gtc gca aac ggc gtc att acc gcc 288
                       <del>Glu Val Ihi</del> Val
  Oly Dys Tyr
                                       90
                  85
       9.0-
62 aca atg ctt tca age gge gta aac aaa gaa atc caa gge aaa aaa cte 336
63 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
                                   105
               100
66 tcc ctg tgg gcc aag cgt caa gac ggt tcg gta aaa tgg ttc tgc gga 384
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DATE: 02/06/2002

TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt Output Set: N:\CRF3\02062002\1674368A.raw 115 120 70 cag ccg gtt acg cgc acc gac gcc aaa gcc gac acc gtc gcc gcc 432 71 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala 72 130 135 74 gec aag ace gec gac aac ate aac ace aag cae etg eeg tea ace tge 480 75 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys 150 155 78 cgc gac gca agt gat gcc agc taa 504 79 Arg Asp Ala Ser Asp Ala Ser 82 <210> SEQ ID NO: 2 83 <211> LENGTH: 167 see tem 6 on Eva Summary Sheet 84 <212> TYPE: PRT 85 <21-> ORGANISM Artificial Sequence 87 **₹220>**) FEATURE: 87 (<223) OTHER INFORMATION: 87 <400> SEQUENCE: 2 88 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val 10 91 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln 20 25 95 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu 40 99 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp 103 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys 107 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala 85 111 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu 100 105 115 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly 115 120 118 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala 130 135 121 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys 150 124 Arg Asp Ala Ser Asp Ala Ser 165 128 <210> SEQ ID NO: 3 129 <211> LENGTH: 510 130 <212> TYPE: DNA 131 <213> ORGANISM: Artificial Sequence

134 <223> OTHER INFORMATION: Description of Artificial Sequence: Chimeric of

Neisseria Meningitidis Class II and Neisseria

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,368A

Gonorrhoeae

133 <220> FEATURE:

138 <220> FEATURE: 139 <221> NAME/KEY: CDS RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002 TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

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144 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
147 atc gcc atc gtc ggt atc ttg gca gcc gtc gcc ctg ccc gca tac caa
148 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
                  20
                                      25
151 gac tac acc gcg cgc gcc caa atg tcc gaa gcc ctg act ttg gca gaa
                                                                        144
152 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
155 ggt caa aaa too goa gtg ato gag tat tat too gao aac ggo aca tto
                                                                        192
156 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe
         50
                              55
159 ccg aac agc aat act toc gca ggt att gct gcc tot aac gag att aaa
                                                                        240
160 Pro Asn Ser Asn Thr Ser Ala Gly Ile Ala Ala Ser Asn Glu Ile Lys
                         70
163 ggt aag tat gtg gca tcg gtt aag gtt gaa ggt aat gcc tct gtt gct
                                                                        288
164 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala
                     85
167 tct att acc gct acc atg aac tct agt aat gtg aat aag gac atc aaa
                                                                        336
168 Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys
                100
                                    105
172 ggt aaa acc ttg gta ctc gtc ggc aaa caa aac tcc ggt tcg gta aaa
                                                                        384
173 Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys
174
            115
                                120
                                                     125
176 tgg ttc tgc gga cag ccg gtt acg cgc gac aac gcc gac aac gac gac
177 Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp
178
        130
                            135
                                                 140
180 gtc aaa gac gcc ggc aac aac ggc atc gaa acc aag cac ctg ccg tca
                                                                        480
181 Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser
182 145
                        150
                                             155
184 acc tgc cgc gat acg tca tct gat gcc aaa
                                                                        510
185 Thr Cys Arg Asp Thr Ser Ser Asp Ala Lys
186
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189 <210> SEQ ID NO: 4
190 <211> LENGTH: 170
191 <212> TYPE: PRT
192 <213 ORGANISM: (Artificial Sequence
194 (220) TEATURE:
194 <223 > OTHER INFORMATION:
194 <400> SEQUENCE: 4
195 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
                                         10
198 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
201 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
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202 35 40 45 204 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe RAW SEQUENCE LISTING DATE: 02/06/2002 PATENT APPLICATION: US/09/674,368A TIME: 14:15:57

60

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

203		50					55					60								
	Pro 65	Asn	Ser	Asn	Thr	Ser 70		Gly	Ile	Ala			Asn		Ile					
208		Tira	Пост	W-1	λl ¬	_		T	17-1	C1	75				37- 3	80				
211	Gly	тйг	TYT.	val	85	261	Val	гуѕ	Val	90	Gry	ASI	ALA	ser	95	Ala				
	Ser	Tle	ሞኮኮ	λla		Met	λen	Sar	Sar		V = 1	λcn	Tuc	λαη		Tuo		-		
214	361	116	1111	100	1111	Mec	ASII	261	105	ASII	Val	ASII	гуs	110	116	rys				
	Gly	Lare	Thr		Val	T.A.II	Val	Glar		Cln	7 cn	Sor	Clv		37 - 3	Two				
217	GLY		115	пеа	Val	Бец	Val	120	nys	GIII	ASII	361	125	261	val	ьys				
	Trp			Glv	Gln	Pro	V=1		724	λcn	A cn	ת ד ת		N c n	7 0 0	7 ~~				
220		130	Cys	GIY	GIII	110	135	1111	AIG	ASP	ASII	140	АБР	ASII	ASP	Asp				*
	Val		Δen	λla	Glv	Δen		G1 v	Tle	Glu	Thr		ніс	T.OU	Pro	Sar				
	145	шуз	rsb	AIG	GLY	150	H511	GLY	116	GIU	155	пур	птэ	ьеu	PIO	160				
	Thr	Cve	Δra	Aen	ሞbr:		Ser	Acn	בומ	Lare	133					100				
226	1111	Cys	A + 9	nsp	165	JCI	Jer	АЗР	AIG	170										
	~210	> ८ ₽	יט דר	NO.						170				•						
	0 <210> SEQ ID NO: 5 1 <211> LENGTH: 30																			
	\cdot																			
	2 <212> TYPE: DNA 3 <213> ORGANISM: Neisseria gonorrhoeae																			
	<213> ORGANISM: Neisseria gonorrhoeae <400> SEQUENCE: 5																			
	<pre><400> SEQUENCE: 5 ccccgcgcca tggataccct tcaaaaaggc 30</pre>																			
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	<pre><211> LENGTH: 30 <212> TYPE: DNA</pre>																			
	<212> TYPE: DNA <213> ORGANISM: Neisseria gonorrhoeae																			
	2 <213> ORGANISM: Neisseria gonorrhoeae 3 <400> SEQUENCE: 6																			
	<pre>< <400> SEQUENCE: 6 5 gggcctggat ccgtgggaaa tcacttaccg 30</pre>																			
	5 gggcctggat ccgtgggaaa tcacttaccg 30 3 <210> SEQ ID NO: 7																			
	<211																		-	
	<212																			
	<213				Neis	seri	a go	onori	hoea	ae										
	<400						-										·			
254	ggct	ctag	ac t	gtca	gaco	a ag	rttta	actc									29			
256	<210	> SE	Q ID	NO:	8	_														
257	<211	> LE	NGTH	1: 27	•															
	<212													•						•
259	<213	> OR	GANI	SM:	Neis	seri	a go	morr	hoea	ie .										
261	<400	> SE	QUEN	ICE:	8															
262	ggct	ctag	at t	gaag	catt	t at	cagg	19									27		•	
264	<210	> SE	Q ID	NO:	9															
265	<211	> LE	NGTH	: 28																
266	<212	> TY	PE:	DNA																
267	<213	> OR	GANI	SM:	Neis	seri	a go	norr	hoea	e				•						
269	<400	> SE	QUEN	CE:	9															
270	ggct	ctag	at a	aaca	gtaa	t ac	aagg	ıgg									28			
	<210						· - ·												 	
273	<211	> LE	NGTH	: 28															 	

275 <213> ORGANISM: Neisseria gonorrhoeae

274 <212> TYPE: DNA

205

50

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/674,368A DATE: 02/06/2002

TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

277 <400> SEQUENCE: 10	
278 ggctctagat tagaaaaact catcgagc	28
281 <210> SEQ ID NO: 11	·
282 <211> LENGTH: 36	
283 <212> TYPE: DNA	
284 <213> ORGANISM: Neisseria Meningitidis Class I	
287 <400> SEQUENCE: 11	•
288 ccccgcgcca tggacaccct tcaaaaaggt tttacc	36
290 <210> SEQ ID NO: 12	•
291 <211> LENGTH: 39	•
292 <212> TYPE: DNA	
293 <213> ORGANISM: Neisseria Meningitidis Class I	
295 <400> SEQUENCE: 12	
296 gggcctggat ccgagtggcc gtggaaaatc acttaccgc	39
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299 <211> LENGTH: 31	•
300 <212> TYPE: DNA	
302 <213> ORGANISM: Neisseria Meningitidis Class I	
304 <400> SEQUENCE: 13	•
305 ceggegegte teteaeggeg aatggeeegg e	31
307 <210> SEQ ID NO: 14	
308 <211> LENGTH: 39	
309 <212> TYPE: DNA	
310 <213> ORGANISM: Neisseria Meningitidis Class I	
312 <400> SEQUENCE: 14	•
313 gggcctggat ccgagtggcc gtggaaaatc acttaccgc	39
316 <210> SEQ ID NO: 15	
317 <211> LENGTH: 25	
318 <212> TYPE: DNA	
319 <213> ORGANISM: Neisseria gonorrhoeae	
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327 <213> ORGANISM: Neisseria gonorrhoeae	
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337 <400> SEQUENCE: 17	25
338 gcataattcg tgtcgctcaa ggcgc	43
343 <210> SEQ ID NO: 18	•
344 <211> LENGTH: 39	
345 <212> TYPE: DNA 346 <213> OPCANISM: Neigneria Maningitidis Class I	
346 <213> ORGANISM: Neisseria Meningitidis Class I 348 <400> SEQUENCE: 18	
240 /400% SEÄNENCE: TO	•

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002 TIME: 14:15:59

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

M:270 C: Current Application Number differs, Replaced Application Number

M:271 C: Current Filing Date differs, Replaced Current Filing Date

M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

M:258 W: Mandatory Feature missing, <220> FEATURE:

M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

M:258 W: Mandatory Feature missing, <220> FEATURE: M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

2/6/02



iyera@wyeth.com

Wyeth

May 2, 2002

Mr. Robert Sparr, Esq. U.S. Patent and Trademark Office Washington, D.C. 20231

Re:

U.S. Application No. ACY-33377-00

Serial No. 09/674368

Assignee: American Cyanamid Company

Inventors: Metcalf et al.

Title: Vaccines Containing Recombinant Pilin Against Neisseria Gonorrhoeae

Dear Mr. Sparr:

I am writing this letter, pursuant to our telephone conversation of April 24, 2002, to request you to make a determination as to whether, based on the facts set out below, the Patent Office (the "Office") would be willing to withdraw the holding of abandonment in the above-identified application and provide the Applicants with an extension of time to respond to the "Notification of Defective Response."

STATEMENT OF MATERIAL FACTS AND REASONS FOR GRANTING RELIEF

The above-identified application (U.S. serial No. 09/674368) was filed as a "National Stage" application under 35 U.S.C. §371 on October 27, 2000, from a PCT application, International Application Number PCT/US99/09486, filed on April 29, 1999, and claims priority from U.S. Provisional Application No. 60/083,405 filed April 29, 1998.

The application as filed contained a sequence listing both in a computer readable form and as a paper copy, which was generated using PatentIn Version 2.0.

On June 11, 2001, the Office mailed a "Notification to Comply with Requirements for Patent Application Containing Nucleotide Sequences and/or Amino Acid Disclosures" (the "Notification"), wherein the Office stated that the "computer readable form that had been filed with this application has been found to be damaged and/or unreadable" and requested the Applicants to submit a substitute computer readable sequence listing as required under 37 C.F.R. §§ 1.821 – 1.825. Specifically, in the Raw Sequence Listing Error Report (the "Report") mailed with the Notification the following errors were identified:

- (1) The number/text at the end of each line wrapped down to the next line; and
- (2) The file was not saved in ASC II (DOS) text as required by the sequence rules. (see Exhibit 1).

The report further cautioned the Applicants not to use the "copy to disk" function of the PatentIn Version 2.0 as a "bug" in the software would cause a corrupted file resulting in missing mandatory numeric identifiers and responses.

On December 12, 2001, the Applicants filed a response to the "Notification" with a petition for extension of time and fees. Along with the response, the Applicants submitted a substitute computer readable form and a paper copy of the sequence listing wherein the Applicants corrected the errors that were identified in the Report, together with a statement as required under 37 C.F.R. §§ 1.825. In generating the computer readable form of the sequence listing, wherein the errors identified in the Report were corrected, the Applicants used PatentIn Version 3.0 and the "Sequence Checker" function of Version 3.0.

On March 18, 2002, the Office mailed a "Notification of Defective Response" and set a "time limit of one month from the date of this Notification or the Notice of Missing Requirements, whichever is longer." The only error identified in the Raw Sequence Listing Error Summary Report that was sent with the Notification of Defective Response was an error caused by a "bug" in PatentIn Version 2.0, which caused sections <220> through <223> to be missing from amino acid sequences 2 and 4. (see Exhibit 2). The Report in paragraph 6

further stated that, "[n]ormally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence," and that the only way to rectify this error is to "manually copy the relevant <220> <223> section to the subsequent amino acid sequence."

The Applicants respectfully submit that the Applicants followed the suggestions of the Office in generating a substitute computer readable form of the sequence listing in responding to the Notification of July 11, 2001. The Applicants submit that due to software incompatibility between PatentIn Version 2.0 and the Version 3.0, the software failed to automatically generate sections <220> through <223> in the amino acid sequences 2 and 4. Furthermore, since the March 18, 2002 suggestion to manually copy the relevant sections <220> through <223> from the nucleic acid sequence 1 and 3 into the amino acid sequences 2 and 4 was not made in the "Raw Sequence Listing Error Report" mailed with the "Notification" of July 11, 2001, the Applicants were unaware that the missing mandatory sections needed to be corrected.

In view of the above, the Applicants respectfully request that the Office withdraw the holding of abandonment. The Applicants further request that the Applicants be granted an extension of time to file a response to the "Notification of Defective Response" together with a substitute computer readable form of the sequence listing.

CONCLUSION

In view of the material facts set forth above, the Applicants respectfully request that the holding of abandonment be withdrawn, and the Applicants be granted relief to submit a substitute corrected computer readable form of the sequence listing.

Should you need to contact me or need any additional information, please do not hesitate to call me at #(845) 602-2189.

Sincerely yours, 2

Anand (Andy) P. Iyer, Ph.D.

Alan M. Gordon

aln M. Hadin

Reg. No. 30,637

Attorney for Applicants

AIP/awp

Wyeth

EXHIBIT A

NOTIFICATION TO COMELY WITH REQUIREMENTS FOR PACINT APPLICATIONS CONTAINING NUCLE DE SEQUENCE AND/OR AMINO DID SEQUENCE DISCLOSURES

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

	•	·	
The ap	pplication fails to comply with the require	ements of 37 CFR 1 821	-1 825
This ap	pplication does not contain, a "Sequence	listing" as a separate p	er of the
disclos	sure on paper copy or compact disc, as r	required by 37 CED 1 92	1(c)
П А сору	y of the "Sequence Listing" in computer	readable format bas not	I(C). heen submitted on
require	ed by 37 CFR 1.821(e).	· · · · · · · · · · · · · · · · · · ·	occu addillited 32
A copy	y of the "Sequence Listing" in computer	readable form has been	submitted The
content 37 CFR	t of the computer readable form, howeve 1:822 and/or 1:832, as indicated on the ce Listing."	er, does not comply with	the requirements of
X The cor	omputer readable form that has been filed	with this application has	s been found to be
damage substitu	ed and/or unreadable as indicated on the ute computer readable form must be subr	attached CRF Diskette F	Problem Report. A
i ne par	per copy or compact disc of the "Sequen	nce Listing" is not the sar	ne as the
comput	iter readable form of the "Sequence Listing	ng" as required by 37 CI	FR 1.821(e).
Other:		······································	
		· · · · · · · · · · · · · · · · · · ·	
*			
APPLICANT MUS	ST PROVIDE:		
	ial or substitute computer readable form	(CRF) of the "Sequence	Listing "
An initi	ial or substitute paper copy or compact d	lise of the "Sequence Lis	ting " as well as ar
amendn	ment directing its entry into the specifica	tion.	
A staten	ment that the contents of the paper or con	mpact disc and the comp	uter readable form
are the	same and, where applicable, include no	new matter, as required	by 37 CER
1.821(e)), 1.821(f), 1.821(g), 1.825(b) or 1.825((d).	
OP OHECTIONS	E DECARDING COLOR		
CALL:	S REGARDING COMPLIANCE WITH	THESE REQUIREMEN	TS, PLEASE
(703) 308-	-4216, for Rules interpretation,		
(703) 308-	-4212, for CRF submission help,		•
(703) 287-	-0200, for PatentIn software help.		
•	•		· //
		D-1 1 D 14000	N !/4

Deborah D. William

Telephone: 703-305-3744

FORM PCT/DO/EO/920 (March 2001)

STATES DESIGNATED/ELECTED OFFICE (DU/EO/US)
1. The following items have been stitled by the applicant or the IB to the United Separatent and Trademark Office as a Designated state (37 CFR 1.494) an Elected Office (37 CFR 1.495): Indication of Small Entity Status.
Copy of the international analysis and Translation of the international analysis and the inte
_
Copy of Article 19 amendments.
Priority Document.
The International Preliminary Examination Report in English and its Annexes, if any.
Translation of Annexes to the International Preliminary Examination Report into English.
Li San and the michigan observations of Chamman of Report into English.
2. Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be file
prior to 20 or 30 months from the priority date to avoid abandonment.
U.S. Basic National Fee. Copy of the international application.
3. The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:
a. Translation of the application into English. A processing fee will be required if submitted
later than the appropriate 20 or 30 months from the priority date.
The current translation is defective for the reasons indicated on the attached Notice of Defective
Translation.
b. Processing fee for providing the translation of the application and/or the Annexes later than the
appropriate 20 or 30 months from the priority date (3.7 CFR 1.492(f)).
C. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying
the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.
The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the
priority date (37 CFR 1.492(e)).
4. Additional claim fees of \$ as a large entity small entity, including any required multiple dependent
claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.
5. [x] Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached
PCT/DO/EO/920.
ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.
The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).
6. If box 3a or 3c is checked, a translation of the Annexes MUST be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date. 7. The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d) or 30 (37 CFR 1.495(d)) months from the priority date.
Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)
A copy of this notice MUST be returned with this response.
Enclosed: PCT/DO/EO/917 Notice of Defective Translation
PTO-875 X PCT/DO/EO/920
Deborah D. Williams
FORM PCT/DO/EO/905 (March 2001)

NOTIFICATION OF MI! NG REQUIREMENTS UNDER 35 U C. 371 IN THE UNITED

E MAILED:
NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U. 371 IN THE UNITED STATES (FIGNATED/ELECTED OFFICE (D. 5/US)
1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated Office (37 CFR 1.494) an Elected Office (37 CFR 1.495):
[7], U.S. Basic National Fee. Indication of Small Entity Status. [7] Copy of the international application [7] Translation of the international application into English.
Oath or Declaration of inventors(s). Translation of Article 19 amendments into English.
Copy of Article 19 amendments. Other:
Priority Document.
The International Preliminary Examination Report in English and its Annexes, if any.
Translation of Annexes to the International Preliminary Examination Report into English.
2. Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid-abandonment. [] U.S. Basic National Fee. [] Copy of the international application.
3. The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:
a. Translation of the application into English. A processing fee will be required if submitted
later than the appropriate 20 or 30 months from the priority date. The current translation is defective for the reasons indicated on the attached Notice of Defective
Translation. b. Processing fee for providing the translation of the application and/or the Annexes later than the
appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).
c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying
the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.
The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the
priority date (37 CFR 1.492(e)). 4. Additional claim fees of \$ as a large entity small entity, including any required multiple dependent
claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.
5. Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.
ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONNENT.
The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).
6. If box 3a or 3c is checked, a translation of the Annexes MUST be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date. 7. The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) for 30 (37 CFR 1.495(d)) months from the priority date.
Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)
A copy of this notice MUST be returned with this response.
Enclosed: PCT/DO/EO/917 Nouce of Defective Translation RECEIVED
PTO-875 PCT/DO/EO/920 Pabart D. Millians (9/4) U.N. 1 3 2001

FORM PCT/DO/EO/905 (March 2001).

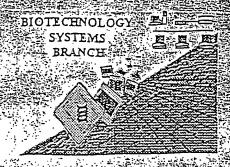
Deborah D. Williams

JUN 1 3 2001

Telephone: 703-305-3744

ANNETTE CROMER





The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

09/674,368

Source

PCT/09

Date Processed by STIC

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

- PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW.

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Raw Sequence Listing Error Summary

ERROR DETECT	ED SUGGESTED CORRECTION SERIAL NUMBER: 09/674,368
AT N: NEW RULES CASE: 1 Wrapped Nucleics	5: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE The numbernext at the end of each line "Wapped" down to the next line.
- Trapped Macieles	
	This may occur if your file was retrieved in a word processor after creating it.
•	Please adjust your right margin to .3, as this will prevent "wrapping".
2 Wrapped Aminos	The amino acid number/text at the end of each line wrapped down to the next line.
•	This may occur if your file was retrieved in a word processor after creating it.
	Please adjust your right margin to .3, as this will prevent "wrapping".
3	
J Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes spaces.
4 Misaligned Amino Acid	The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering	between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
61/ 11/ 12/09/	
5 V Non-ASCII	This file was not saved in ASCII (DOS) text as required by the Sequence Rules.
	Please ensure your subsequent submission is saved in ASCII lext so that it can be processed.
6 Variable Length	Sequence(s) contain his or Xaa's which represented more than one residue.
	As per the rules, each n or Xaa can only represent a single residue.
•	Please present the maximum number of each residue having variable length and
· .	indicate in the (ix) feature section that some may be missing.
	and core at the tax restore section that some may be missing.
7 Palentin ver. 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
	sequence(s) Normally, Patentin would automatically generate this section from the
•	previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
•	to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
	sections for Artificial or Unknown sequences.
8 Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please use the following format for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (i) SEQUENCE CHARACTERISTICS:(Oo not insert any headings under "SEQUENCE CHARACTERISTICS")
	(xi) SEQUENCE DESCRIPTION:SEQ 10 NO:X:
	This sequence is intentionally skipped
•	This sequence is memorially simples
	Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
9 Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES)	<210> sequence id number
,	<400> sequence id number
	000
10 Use of n's or Xaa's	Hen of his hadias Yan's have been detected in the Convenee Listing
(NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW ROCES)	Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
	In <220> to <223> section, please explain location of n or Xaa, and, which residue n or Xaa represents.
11 Use of <213>Organism	Constant to the control of the contr
· (NEW RULES)	Sequence(s) are missing this mandatory field or its response.
· (AEW ROCES)	
12 - 11	
Use of <220>Feature	Sequence(s) are missing the <220>Feature and associated headings.
(NEW RULES)	Use of <220 > 10 <223 > is MANDATORY if <213 > ORGANISM is "Antificial" or "Unknown"
•	Please explain source of genetic material in <220> to <223> section.
	(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rul

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TIME: 11:37:48
                     PATENT APPLICATION: US/09/674,368
                                                                                     Does Not Comply
                                                                                Corrected Diskette Neede
                     Incut Set : A:\PTO.txt
                     Output Set: N:\CRF3\03072001\1674368.raw
      5 <110> APPLICANT: American Cyanamid Company
      7 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria
              Gonorrhoeae or Neisseria Meningitidis
                                                                          sel Lem 5 on End
     11 <130> FILE REFERENCE: 33377-00/PCT
13 <140 > CURRENT APPLICATION NUMBER: US/09/674,368 
14 <141 > CURRENT FILING DATE: 2000-10-27
                                                                          Summer Sheet
     15 <160> NUMBER OF SEQ ID NOS: -24
     18 <170> SOFTWARE: PatentIn Ver. 2.0
ERRORED SEQUENCES
     299 <210> SEQ ID NO: 13
                                                             movery-format enou

(see item I on

Even Summing
    300 <211> LENGTH: 31
    .301 <212> TYPE: DMA
     303 <213> ORGANISM: Neisseria Meningitidis Class I
     305 <400> SEQUENCE: 13
E--> 306 ccggcgcgtc tctcacggcg aatggcccgg c
     307
     396 <210> SEQ ID NO: 24
                                                                                        Sheet)
     397 <211> LENGTH: 22
     398 <212> TYPE: PRT
    399 <213> ORGANISM: Neisseria gonorrhoeae
    404 <400> SEQUENCE: 24
    405 Glu Ala Ile Leu Leu Ala Glu Gly Gln Lys Ser Ala Val Thr Glu Tyr
                                              10
    408 Tyr Leu Asn His Gly Lys
E--> 441/:1
E--> 443 B
                         delite at end I file
          ACY-33377-00
```

see follning pages for more evan

RAW SEQUENCE LISTING

DATE: 03/07/2001

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/674,368

DATE: 03/07/2001

TIME: 11:37:50

Input Set : A:\PTO.txt

Output Set: N:\CRF3\03072001\I674368.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number L:14 H:271 C: Current Filing Date differs, Replaced Current Filing Date L:60 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:64 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:68 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:72 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:76 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:80 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1

L:37 M:258 W: Mandatory Feature missing, <220> FEATURE:

1:87 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

L:194 M:258 W: Mandatory Feature missing, <220> FEATURE:

L:194 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

L:305 H:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:31 SEQ:13 L:441 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:24

M:332 Repeated in SeqNo=24

RAW SEQUENCE LISTING DATE: 03/14/2001 PATENT APPLICATION: US/09/674,368 TIME: 12:10:34

Input Set : A:\Pto.amc

Cutput Set: N:\CRF3\03142001\1674368.raw

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                                                                                 96
       145 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
                        .20
                                              25 √ '
       148 gac tac acc gog ogo god caa atg too gaa god otg act ttg goa gaa
                                                                                 144
       149 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
       152 ggt.caa aaa too gca gtg ato gag tat tat too gac aac ggc aca tto
                                                                                192
       153 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe
               50
                                  . 55
      156 ccg aac agc aat act too gca ggt att gct gcc tot aac gag att aaa
      157 Pro Aso Ser Aso Thr Ser Ala Gly Ile Ala Ala Ser Aso Glu Ile Lys
      158 65
                                70
      160 ggt aag tat gtg gca tcg gtt aag gtt gaa ggt aat gcc tct gtt gct
      161 Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala
      162 .
                           8.5
      164 tot att acc got acc atg aac tot agt aat gtg aat aag gac atc aaa
      165 Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys
                      100
                                           105
      169 ggt aaa acc ttg gta ctc gtc ggc aaa caa aac tcc ggt tcg gta aaa
      170 Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys
                 115
                                       120
                                                            125
      173 tgg tto tgc gga cag ccg gtt acg cgc gac aac gcc gac aac gac gac
      174 Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp
              130
                                 . 135
                                                        140
      177 gtc aaa gac gcc ggc aac aac ggc atc gaa acc aag cac ctg ccg tca
      178 Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser
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     188 <212> TYPE: PRT
189 <213 ORGANISM: Artificial Sequence W--> 191 <220 FEATURE: W--> 19 (223) OTHER INFORMATION:
                                                          Dame em-se iten /3

on Eun

1 Leu Met Ile Val

15
1 Pro Ala Tyr Gln

Jumnay Sheet
     191 (40% SEQUENCE; 4
     192 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
     193
     195 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
  196
                      20
    198 Asp Tyr Thr Ala Arg Ala Gln Met Ser Glu Ala Leu Thr Leu Ala Glu
    201 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe
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    204 Pro Asm Ser Asm Thr Ser Ala Gly Ile Ala Ala Ser Asm Glu Ile Lys
    205 65
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4

RAW SEQUENCE LISTING DATE: 03/14/2001 PATENT APPLICATION: US/09/674,368 TIME: 12:10:34

Input Set : A:\Pto.amc

Output Set: N:\CRF3\03142001\I674368.raw

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71 gcc aag acc gcc gac aac atc aac acc aag cac ctg ccg tca acc tgc
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   ;◇ 73 145 .
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     75 cgc gac gca agt gat gcc agc taa
                                                                            504
     76 Arg Asp Ala Ser Asp Ala Ser
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     79 <210> SEQ ID NO: 2
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     81 <212> TYPE: PRT .
82 ORGANISM: Artificial Sequence W--> 84 <220> FEATURE:
                                                           I see sem 13
       <223> OTHER INFORMATION:
W--> 8√
    84 COC SEQUENCE: 2
    85 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
                                             10
    88 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
                    20
                                        25
    92 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
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                                    40
                                                         45
    96 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
                                55
    100 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
   104 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala
                                             90
   108 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
   109
                   100
                                       . 105
   112 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly
   113
              115
                                   120
                                                        125
   115 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
   116
           130.
                               135
                                                    140
   118 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
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  133
            Gonorrhoeae ·
  135 <220> FEATURE:
 136 <221> NAME/KEY: CDS
  137 <222> LOCATION: (1)..(510)
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 141 Het Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Het Ile Val
```

3

Wyeth

EXHIBIT B

ATTY. DOCKET NO. FIRST NAMED APPLICANT

Thomas N III Metcalf

33377-00

U.S. APPLICATION NUMBER NO. 09/674,368

INTERNATIONAL APPLICATION NO.

PCT/US99/09486

LA. FILING DATE

PRIORITY DATE

04/29/1999

CONFIRMATION NO. 6981 371 FORMALITIES LETTER OC000000007646414°

Alan M Gordon -Patent Law Department 2B American Home Products Corporation One Campus Drive Parsippany, NJ 07054

Date Mailed: 03/18/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Oath or Declaration

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
 - -APPLICANT-MUST-PROVIDE:...
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."

- For questions regarding communication of or the contract of the contract
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin S re, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

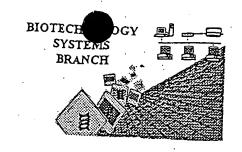
DEBORAH D WILLIAMS

Telephone: (703) 305-3744

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY, DOCKET NO.
09/674.368	PCT/US99/09486	33377-00

FORM PCT/DO/EO/916 (371 Formalities Notice)



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09 Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS: http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual - ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room-1803, Crystal-Plaza-Two, 2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Litting Error Summary

RROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/674,368A		•
TTN: NEW RULES CAS	es: Please disregard english "Alpha" headers, which were inserted by Pto	SOFTWAR	E.
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to J; this will prevent "wrapping."		
!Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	•	
IMisaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use apace characters, instead	··· .	
INon-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	-	•.
Yanable Length	Sequence(s) contain n's or Xan's representing more than one residue. Per Sequence Rules, each n or Xan can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.		•
Patentin 2.0 "bug"	A "bug" in Patently version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) 2 + . Normally, Patently would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.		
Skipped Sequences (OLD RULES)	Sequence(s)missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	•	-
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.		
Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000		· · · · · ·
Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220><223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xan represents.		· · · · · · · · · · · · · · · · · · ·
Invalid <213> Response	Per 1.823 of Sequence Rules, the only valld <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence		
Use of <220> 	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	•	
Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of Palentin version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	•	
Mboscofu	n can only be used to represent a single nucleoniae in a nucleic acid sequence. It is not used to represent any value not specifically a nucleotide.		
		·	· · · · · · · · · · · · · · · · · · ·



PCT09

RAW SEQUENCE LISTING DATE: 02/06/2002
PATENT APPLICATION: US/09/674,368A TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\I674368A.raw

Does Not Comply
Corrected Diskette Needed

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  7 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria
          Gonorrhoeae or Neisseria Meningitidis
 11 <130> FILE REFERENCE: 33377-00/PCT
 13 <140> CURRENT APPLICATION NUMBER: US/09/674,368A
 14 <141> CURRENT FILING DATE: 2001-12-11
 16 <160> NUMBER OF SEQ ID NOS: 24
 18 <170> SOFTWARE: PatentIn Ver. 2.0
 20 <210> SEQ ID NO: 1
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 22 <212> TYPE: DNA
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28
         Gonorrhoeae
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41 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
42
                20
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44 gac tac acc gcc cgc gcg caa gtt tcc gaa gcc atc ctt ttg gcc gaa 144
45 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Leu Ala Glu
46
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                                 40
48 ggt caa aaa tca gcc gtt acc gag tat tac ctg aat cac ggc gaa tgg 192
49 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
       50
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52 ccc ggc aac aac act tot gcc ggc gtg gca tot tot toa aca atc aaa 240
53 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
54 65
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58 ggc aaa tat gtt aag gaa gtt aca gtc gca aac ggc gtc att acc gcc 288
<del>55 Cly Eys Tyr Yal</del>
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                                        <u> 90</u>
        95
                             __و_و__
                                                 ___<del>9.5</del>__
62 aca atg ctt tca agc ggc gta aac aaa gaa atc caa ggc aaa aaa ctc 336
63 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
                                  105
66 tcc ctg tgg gcc aag cgt caa gac ggt tcg gta aaa tgg ttc tgc gga 384
67 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly
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RAW SEQUE LISTING

PATENT APPLICATION: US/09/674,368A

DATE: 02/06/2002 TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

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PATENT APPLICATION: US/09/674,368A

E: 02/06/2002 TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

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40 204 Gly Gln Lys Ser Ala Val Ile Glu Tyr Tyr Ser Asp Asn Gly Thr Phe

202

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/674,368A

DA 02/06/2002 TIME: 14:15:57

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

	205		50					55					60		•						
ų.		Pro		Ser	Asn	ጥከተ	Ser			Tla	בות	- ו מ			~1	71.	T				
:	208	65					70		017	110	AT a	75		ASII		116	_				
		Gly	Lvs	Tvr	Val	Ala			Lvs	Val	Glu					375.3	80				
	211	1	-1 -	- 1- .		85					90		ASII	MIG	261		Ala				
		Ser	Ile	Thr	Ala		Met	Asn	Ser	Ser) cn	Tarc	7.00	95	Lys				
}	214				100				-	105	NOII	*41	ASII	пÃ2		ire	ьys				
:		Gly	Lvs	Thr	-	Val	Leu	Va l	Gl v		Gla	λcn	507	C1 11	110	17. 7	T	•			
	217	1	_,_	115			200	,,,,	120	בעם	GIII	ASII	261	125	Ser	val	rys				
		Trp	Phe		Glv	Glin	Pro	٧al		A = ~	7.00	7 ~ ~	71 5		3						
	220		130					135	T 111	AT 9	ASP	ASII		Asp	ASII	ASP	Asp				
				Asn	λla	Glv	Aen		Gly	Tlo	C1	mb	140	***	.	5	Ser.				
	223	145		p	ALU	0 11	150	N3II	GIY	116	GIU		ьys.	HIS	Leu	Pro					
•		Thr (Cve	λτα	A cn			Sa-	7 0 5	71-	T	155					160				
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		ccccg					+ + ~		3666									•			
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		<211>				Ü													• ,		
		<212>																			
		<213>				Neic	cari	3 60	2022	haa-											
		<400>					SET T	a yo	HOLL	noea	e						-				
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		<210>					a	acc.	accg		•	•	•					30			
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TIME: 14:15:57

Input Output

: A:\33377PCT.APP.txt et: N:\CRF3\02062002\1674368A.

277 <400> SEQUENCE: 10	·	
278 ggctctagat tagaaaaact catcgagc		28
281 <210> SEQ ID NO: 11	T-8-1	
282 <211> LENGTH: 36	•	
283 <212> TYPE: DNA		
	a Class T	
284 <213> ORGANISM: Neisseria Meningitid: 287 <400> SEQUENCE: 11	is class I	
		3.6
288 ccccgcgcca tggacaccct tcaaaaaggt ttta	icc	36
290 <210> SEQ ID NO: 12		
291 <211> LENGTH: 39		
292 <212> TYPE: DNA		
293 <213> ORGANISM: Neisseria Meningitidi	s Class I	
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300 <212> TYPE: DNA	•	
302 <213> ORGANISM: Neisseria Meningitidi	s Class I	
304 <400> SEQUENCE: 13		
305 ccggcgcgtc tctcacggcg aatggcccgg c		31
307 <210> SEQ ID NO: 14		
308 <211> LENGTH: 39		
309 <212> TYPE: DNA	·	
310 <213> ORGANISM: Neisseria Meningitidi	s Class I	•
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313 gggcctggat ccgagtggcc gtggaaaatc actt	accgc	39
316 <210> SEQ ID NO: 15		
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322 gcataattcg tgtcgctcaa ggcgc		25
324 <210> SEQ ID NO: 16		
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326 <212> TYPE: DNA		
327 <213> ORGANISM: Neisseria gonorrhoeae		·
329 <400> SEQUENCE: 16		
330 gccgcgcgtc tcccgtgatt caggtaatac tcgg		34
332 <210> SEQ ID NO: 17	•	
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337 <400> SEQUENCE: 17		•
338 gcataattcg tgtcgctcaa ggcgc	•	25
343 <210> SEQ ID NO: 18		
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345 <212> TYPE: DNA		
346 <213> ORGANISM: Neisseria Meningitidi:	Clase T	
348 <400> SEQUENCE: 18	OT022 I	
240 /400% SEGUDACE: TO	• •	



DATE: 02/06/2002 TIME: 14:15:59

PATENT APPLICATION: US/09/674,368A

Input Set : A:\33377PCT.APP.txt

Output Set: N:\CRF3\02062002\1674368A.raw

- 13 M:270 C: Current Application Number differs, Replaced Application Number
- % 14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 - 60 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 - 64 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
- 68 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 - 72 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 - 76 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 - 80 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 - 87 M:258 W: Mandatory Feature missing, <220> FEATURE:
 - 87 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
 - 194 M:258 W: Mandatory Feature missing, <220> FEATURE:
 - 194 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

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